

## **Foreign Reserves of the Iraqi Central Bank's and its influence on Foreign Investment flows**

((Applied research in the period 2004 – 2019))

**Dr. Ali H. N. BniLam**

Lecturer at Dijlah University College

Financial & Banking sciences Dept

**Dr. Salim S. Hammood**

Lecturer at Imam Jaafar AL– Sadig

---

**Abstract:** The importance of research results from its analysis of a major economic variable, which is foreign investment in an unstable environment that has not been witnessed by any country in the world. And because the research is applied, it has used real data on the work of the Central Bank of Iraq. Therefore, the results they will obtain are concrete results, And the problem of research may therefore be summarized by the following question: Has the Central Bank of Iraq been able to contribute to attracting foreign investment via its foreign reserves?

To prove the main premise of the research, “there is a significant statistical relationship between the Central Bank of Iraq's foreign exchange reserves and foreign investment” the standard quantitative approach has been applied, and the research reached several conclusions, The relationship between the Iraqi Central Bank's foreign assets and foreign investment is positive, and this fits into the theoretical details of the research, which reflects the success of the goal of accumulating such reserves, especially since they increased in the period under discussion, It also reflects the success of the Central Bank of Iraq in managing these assets.

**Keyword:** foreign reserves, foreign assets, foreign liabilities, central bank.

## **1. Introduction**

Foreign investment is a subject of interest to most economists in most of the world's states. Interest in her increased during the current period due to several factors, perhaps most important is the economic opening up and transformation of most countries in the world from wave economies to market economies.

The reason is the interest in foreign investment in the profits the country derives from the inflow of foreign capital into its economy. Foreign investment helps lower the unemployment rate, increases the country's gross domestic product and transfers advanced technologies, and has a part to play in creating a competitive environment and many other benefits,

And based on the profits from foreign investment, most countries do their best to attract as much foreign capital as they can, Possibly the most important attraction factor is safety, as the capital seeks a secure investment environment, even if the return on investment is comparatively low. Among the security elements considered as a positive indicator which attracts foreign capital into the country, there is the strength of the central bank and its sobriety, Its financial position and the accessibility of foreign reserves capable of furnishing protection for foreign investments, Foreign reserves are divided into foreign assets which, if increased, are expected to have a positive impact on foreign investment, and foreign liabilities with a negative effect on foreign investment.

## **2. The problem of the Research**

From 2004 to 2019, Iraq suffered from security, political and financial instability, which has been reflected in all aspects of life, including the economy, And the fact that monetary policy is one of the policies that make up economic policy. Therefore, the Central Bank of Iraq was affected by the reality, and the implications of this reality on its ability to manage its foreign reserves, as far as foreign reserves are concerned, they have a major role to play in attracting foreign investment and will thus be affected by foreign reserves, the problem of research may therefore be summarized by the following question:

Has the Central Bank of Iraq been able to contribute to attracting foreign investment via its foreign reserves?

### **3. The important of Research**

The importance of research results from its analysis of a major economic variable, which is foreign investment in an unstable environment that has not been witnessed by any country in the world. And because the research is applied, it has used real data on the work of the Central Bank of Iraq. Therefore, the results they will obtain are concrete results, its importance is also evident as it is a connection between two variables that researchers were unable to see a subject that dealt with in the Iraqi environment and in the specified time point for the research, in addition to the fact that the time period is relatively recent as it ends with the data for the year 2019, which is the last data published by the Central Bank of Iraq.

### **4. Literature Review**

#### **4.1. Hviding et al 2005**

The Reserve Bank of South Africa achieved a remarkable and continuous increase in the formation of foreign reserves after it was suffering from weakness in this aspect, as it reached the same amount of external debt, that is, it met one of the international standards in the formation of foreign reserves, so the study sought to know the size of the foreign reserves that should be Their availability in a country like South Africa adopts a floating exchange rate system, and the study found that the benefits of foreign reserves diminish once they increase the level of the short-term debt stock, meaning that the ratio of international reserves to short-term debt must match the standard ratio in South Africa.

#### **4.2. Kashif et al 2015**

The accumulated foreign reserves in developing countries, including India, have increased during the current decade, and the study sought to measure the effect of the foreign reserves of the Indian Central Bank on open trade, and the study reached building a standard model for forecasting the volume of international trade in terms of foreign reserves and using the logarithmic function, and the equation of the regression line has been proven. And which became evident the moral of the research hypothesis, which stated that there is a positive-directional relationship between the accumulation of reserves and foreigners in India in the openness of trade.

#### 4.3. Kashif et al 2017

India is among the first ten developing countries possessing international reserves, as it ranked ninth, noting that most of these states are in Asia, and there are many elements that affect foreign reserves, and this survey tried to recognize the economic components that bear upon the increase in foreign reserves. In India, with the aim of proving this relationship, the Phillips-Perron time-series stability test and the Dickie-Fuller test were performed to test the relationship. An error correction model was conducted. The study concluded that the negative relationship between trade openness and foreign reserves is contrary to economic theory, as well as the negative relationship between The deficit in the balance of payments and foreign reserves, while the relationship was positive between economic growth and foreign reserves of India.

#### 4.4. Zhou et al 2018

Maintaining a safe level of foreign reserves is a vital matter for most countries of the world, so the study sought to simulate and estimate the feasibility of maintaining the optimal level of foreign reserves for China in light of the possibility of exposure to external shocks resulting from the opening of the Chinese economy to the outside world to provide what was called security. The study found that the main reason for the increase in foreign reserves in China is the increase in financial imports resulting from the increase in goods exported from China to the outside world and that the optimum level of foreign reserves in China is equal to 13% of the gross domestic product and that the main function of foreign reserves formed in China differed from meeting basic transactions to providing financial security.

### **5. Reserves and its relationship to foreign investment**

The guidelines of the International Monetary Fund stated that the foreign reserves of any country are the external assets available at the disposal of the monetary authorities, and under their control to meet the needs of financing the balance of payments, or to intervene in the exchange markets to affect the currency exchange rate, or other related purposes such as maintaining confidence in Local currency and forming a basis for external borrowing (International Monetary Fund, 2013: 3), In addition to being a guarantee for foreign investment, the net foreign reserves represent the foreign assets with the banking system minus the foreign liabilities on the banking system represented by the Central Bank and the banks operating (Central Bank of Iraq, 2017: 3).

The central bank is responsible for managing reserves. It should strive to maximize foreign reserves within reasonable limits of risk that represent a framework for reserves management, so that reserves are always available when needed. As a result, reserve assets portfolios tend to avoid risk to a high degree, which is the consequence. Giving priority to liquidity and preserving reserves before considerations of profit, and this necessarily implies making a trade-off between risk and return when setting priorities for reserves management (Al-Zaghad, 2014: 46), Focusing on the element of safety in the formation of foreign reserves represents an important attraction for foreign investment, which always seeks to enter the markets that it deems safe and the countries that have a financial fortune, as explained by (Thuaid, 2016: 495) as it is considered that foreign companies will not invest in distant economies. Only in the case of studying the risks of this investment.

## **6. Hypotheses & Standard model**

The economic literature suggests that the financial situation of the country affects the draw of foreign investments, as it affords an indication of the investment environment for foreign capital, then the higher the foreign assets of the Central Bank, this will lead to attracting foreign investments, this will be reflected in the signal from the beta coefficient, which is expected to look positive. As a result, the proposed model, based on economic theory, is formulated as follows:

$$Y = \alpha + \beta_1 X_1 \dots (1)$$

Therefore, the first research hypothesis stated that *“there is a positive and significant statistical relationship between the foreign assets of the Central Bank of Iraq and foreign investment”*

As for the increase in the foreign liabilities of the Central Bank, it will contribute to the expulsion of foreign investments, and this will appear on the sign of the negative beta coefficient in the proposed model for the type of relationship between foreign liabilities and foreign investment, which is based on economic theory:

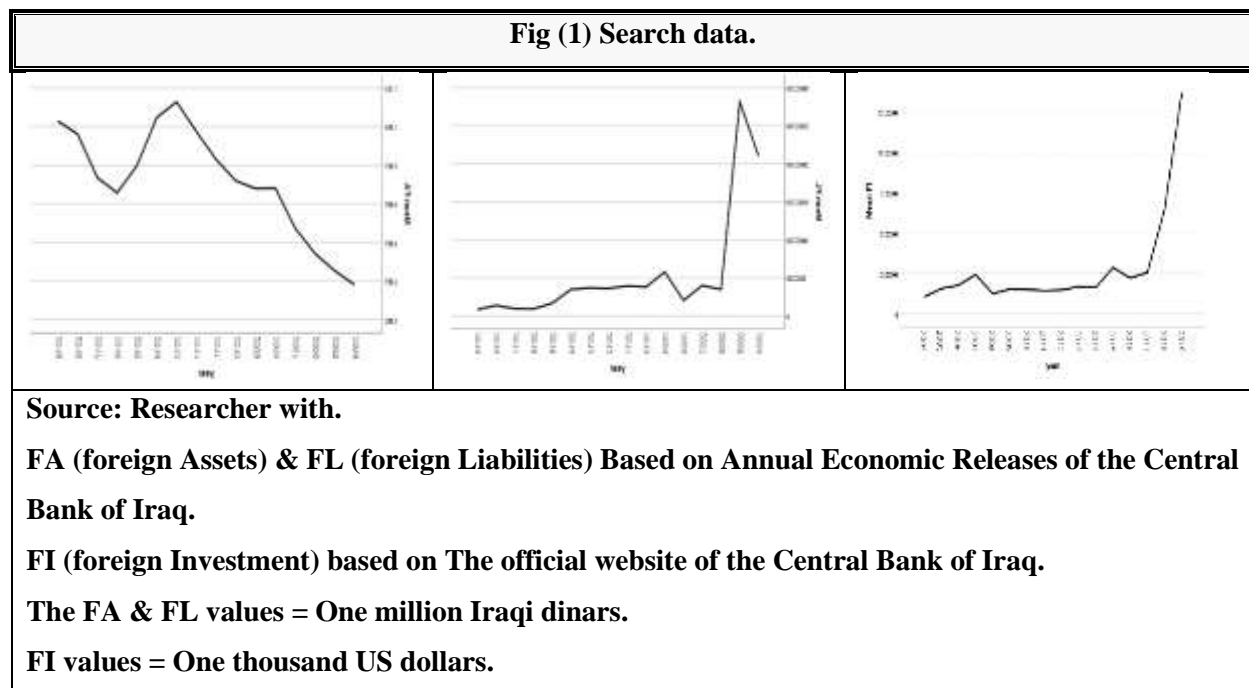
$$Y = \alpha - \beta_2 X_2 \dots (2)$$

Therefore, the second research hypothesis stated that *“there is a negative and significant statistical relationship between the foreign liabilities of the Central Bank of Iraq and foreign investment”*

## 7. Measurement of the relationship between the rate of banking penetration and the number of banks funding SME.

### 8.1. Research variables

The research contained two independent variables FA (foreign Assets) and FL (foreign Liabilities), and one dependent variable FI (foreign Investment), The period of time researched extended from 2004 and It is the year in which the Central Bank of Iraq was regularly issuing periodic reports under its new law, which was enacted after the US occupation of Iraq in 2003, until 2019 And It is the year that witnessed the issuance of the last periodic reports, meaning that the reports of later years have not yet been issued. And as shown in this figure:



## 8.2. Test of normality

Since the time series of research data is below 30 views, the best test for a normal distribution is a Shapiro-Wilk test, the results of the analysis revealed that the independent research variables and the dependent variable follow the normal distribution, This is highlighted by the value of Sig for the FA that reached (0.389), and the value of Sig for the FL that reached (0.000), and the value of Sig for FI which reached (0.00), The values for FL & FI are less than the level of significance  $\alpha=0.05$ , And as indicated in the following table:

<b>Table (1) Normality test on search variables.</b>						
	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	Df	Sig	Statistic	df	Sig
FA	0.165	16	0.200	0.943	16	0.389
FL	0.392	16	0.000	0.582	16	0.000
FI	0.369	16	0.000	0.528	16	0.000

**Source: Prepared by the researcher according to SPSS results.**

Because the time series of FL & FI does not follow the normal distribution, we will process the time series data for them in an attempt to make them follow the normal distribution and the results of the treatment are as shown in the following table:

<b>Table (2) Normality test on (FL) &amp;(FI) after treatment</b>						
	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	Df	Sig	Statistic	df	Sig
FL	0.392	16	0.000	0.582	16	0.000
FI	0.369	16	0.000	0.528	16	0.000

**Source: Prepared by the researcher according to SPSS results.**

The fact that the treatment did not make the time series of FL & FI follow the normal distribution, so we will have to use Nonparametric Test in an attempt to discover relationships between the

study variables, noting that these methods cannot estimate the parameters of the standard models, but rather discover the relationship and its path.

### 8.3. Nonparametric Test Between FA & FI

The Wilcoxon Test demonstrates the existence of a positive sign relationship between (FA) and (FI), which is a significant relationship, Where the value of Z calculated 3.516 is greater than its tabular value which is 2.58 at the level of significance 0.01 and this is proved by the p-value which is 0.000.

As for the path of the relationship, it can be discovered from the values of the mains of the two variables. The main of FA has reached 71822082 which is greater than the main of FI which reached 2835371, That is, the relationship runs from (FA) to (FI) and this is proven by Kruskal-Wallis Test, which appeared significant, as the calculated value of Chi-square was equal to 16 and it is greater than its tabular value, which is 5.81 at the level of significance 0.01 and this is proved by the p-value which is 0.000.

Both tests were tested at a degree of freedom (1 , 14), as shown in the following table:

<b>Table (3) Nonparametric Test Between FA &amp; FI</b>		
Wilcoxon Test	Z value	3.516
	Sign	Positive
	p-value	0.000
Kruskal-Wallis Test	Chi-square	16.000
	p-value	0.000
	Main of FA	71822082
	Main of FI	2835371
<b>Source: Prepared by the researcher according to SPSS results.</b>		

### 8.4. Nonparametric Test Between FL & FI

The Wilcoxon Test demonstrates the existence of a Negative sign relationship between (FL) and (FI), which is not significant relationship, Where the value of Z calculated 1.603 is less than its



tabular value which is 2.58 at the level of significance 0.05 and this is proved by the p-value which is 0.109.

As for the path of the relationship, it can be discovered from the values of the mains of the two variables. The main of FL has reached 5541323 which is greater than the main of FI which reached 2835371, That is, the relationship runs from (FL) to (FI) and this is proven by Kruskal-Wallis Test, which appeared not significant, as the calculated value of Chi-square was equal to 2.250 and it is less than its tabular value, which is 5.81 at the level of significance 0.05 and this is proved by the p-value which is 0.134.

Both tests were tested at a degree of freedom (1 , 14), as shown in the following table:

<b>Table (4) Nonparametric Test Between FL &amp; FI</b>		
Wilcoxon Test	Z value	1.603
	Sign	Negative
	p-value	0.109
Kruskal-Wallis Test	Chi-square	2.250
	p-value	0.134
	Main of FL	5541323
	Main of FI	2835371
<b>Source: Prepared by the researcher according to SPSS results.</b>		

## **8. Conclusion**

8.1. The relationship between the Iraqi Central Bank's foreign assets and foreign investment is positive, and this fits into the theoretical details of the research, which reflects the success of the goal of accumulating such reserves, especially since they increased in the period under discussion, it also reflects the success of the Central Bank of Iraq in managing these assets.

8.2. The time series of foreign liabilities of the Central Bank of Iraq was fluctuating, that is, it was unstable and did not show an overall trend during the period considered, and this is due to a lack of relationship between these liabilities and foreign investment. Their sizes are shaped based on unexplained considerations.

8.3. It is imperative for all the economic institutions of the Iraqi state, including the Central Bank of Iraq, to give foreign investment great importance, on the basis of the encouragement and concessions granted to it and the guarantees that encourage attractiveness, as well as creating a mental image that supports it.

## References

1. International Monetary Fund 2003 ***“International Reserves and Liquidity in Foreign Currency: Guidelines for Preparing a Standard Data Form”*** Arabic edition.
2. Al-Zaghad, F. 2014 ***“The problematic of managing foreign financial reserves, a case study of the Bank of Algeria 2000-2012”*** Master Thesis, Messila University.
3. Thuhid, N. et al 2016 ***“Significance of Foreign Direct Investment on Economic Growth in Bangladesh”*** International Journal of Scientific & Engineering Research, Volume 7 Issue 9.
4. Hviding K. et al 2005 ***“The Case for Building International Reserves”*** International Reserves of the SARB.
5. Kashif E. et al 2015 ***“Accumulation of International Reserves and Impact of Trade Openness Evidence from India”*** International Research of Business and Management, Issue 6.
6. Kashif E. et al 2017 ***“Factors Affecting international reserves with Special Reference to India”*** SAGE Publications, Vision 21.
7. Zhou G. et al 2018 ***“Financial Security and Optimal Scale of Foreign Exchange Reserve in China”*** Journal of Sustainability 10,1724.
8. Economic report of the Central Bank of Iraq 2017.
9. Annual Economic Releases of the Central Bank of Iraq.
10. The official website of the Central Bank of Iraq.